

ABSTRACT

The present invention provides for a bridge fitting for use in a fluid manifold system for being in fluid communication with two or more surface mounted fluid components having an inlet port and an adjacent outlet port. The invention also provides for a housing with a first port connected to a second port, with an internal fluid passageway joining the first and second ports and at least one projection extending from the housing. The bridge fittings may be mounted in a channel block having a groove and an aligned hole for receiving the projection. Another embodiment of the invention provides for a modular surface mount check valve with a valve body having a mounting flange connected thereto, the flange being substantially planar and having an inlet passage located about the center of the flange and an outlet passage located adjacent the inlet passage. The body further comprises a valve chamber in fluid communication with the inlet passage and the outlet passage, the chamber further comprising a valve seat formed at the juncture of the inlet passage and the chamber, and a poppet positioned in the chamber, and a spring mounted in the valve chamber for biasing the poppet towards the valve seat. The invention also provides an air actuated surface mount flow control valve comprising a valve body having a mounting flange connected thereto and the flange being substantially planar and having an inlet passage located about the center of the flange and an outlet passage located adjacent the inlet passage, the body further comprising a cavity in fluid communication with the inlet passage and the outlet passage, a stem positioned in the cavity, and a spring mounted in the cavity for biasing a first end of the stem in sealing engagement with the inlet passage and the outlet passage, the stem further comprising an internal fluid passageway in fluid communication with an actuator fluid compartment located under a lower surface of the stem, and the external source of pressure.